

Concentrated Animal Feeding Operations

Many residents who live near concentrated animal feeding operations (CAFOs) know first hand that odor can be a problem. In order to combat these odors, in March 1999, the Missouri Air Conservation Commission adopted an amendment to the odor rules due to the large number of complaints created by the odors. This amendment requires for the Department of Natural Resources' Air Pollution Control

Program to regulate the odor emissions from the very largest CAFOs.

As of July 30, 1999, Class IA CAFOs were required to submit an odor control plan to the Air Pollution Control Program. In this plan, the facility must describe the measures it would use to control odors. Each CAFO was required to submit its plan by July 1, 2000, and have implemented the strategies by Jan. 1, 2002. At the end of 2001, the department had approved an odor plan for one facility and was working with the other facilities to resolve their issues. After Jan. 1, 2002, the Air Pollution Control Program is to enforce the odor standard stated in the amended rule.

At the Dec. 6, 2001, **Missouri Air Conservation Commission** meeting concerns were presented regarding the enforcement of the olfactometry standard of the odor rules and its sensitivity to background odors. In light



of these concerns, the commission advised the Air Pollution Control Program not to issue violations using this standard of the rules until the program could look into ways to revise the standard to make it reasonable and enforceable. The program expects the revised rules to be effective early 2003.

The department is also continuously monitoring ambient air near large CAFOs. Hydrogen sulfide and ammonia concentrations are being monitored near CAFOs in Mercer and Sullivan counties. The Mercer County site began monitoring in 1999, and the Sullivan County site began monitoring in summer 2001.

As a result of the data collected from the Mercer County monitoring site, Premium Standard Farms and Continental Grain are installing permeable covers on many of their lagoons. High levels of hydrogen sulfide and ammonia have been recorded at this site over the past two years. These

covers will reduce the hydrogen sulfide values.

In addition to the two monitoring sites, the Air Pollution Control Program is collecting and analyzing air samples to further understand how to implement an olfactometry standard for CAFOs. This data should help the department amend the odor rules to make it enforceable and effective.

In November 2001, EPA finalized a consent agreement with Premium Standard Farms to reduce odors at its Missouri CAFOs. The consent agreement requires the reduction of hydrogen sulfide and ammonia emissions from wastewater treatment systems and land application. It also requires monitoring of the various compounds emitted from each facility. The company must also investigate ways to reduce air emissions from the barns.